

#### DETAILED ACTION

1. This Office Action is responsive to the application filed 11/23/2005

#### Objections

2. Line 3 of claim 1 should recite –obtaining connector being information—instead of "obtaining a connector being information".

Line 2 of claim 2 should recite –obtains results from—instead of “obtains result from”.

#### Election/Restriction

3. Restriction to one of the following invention is required under 35 U.S.C. 121:
  - I. Claims 1-17, drawn to a terminal containing a connector obtaining unit used for specifying a function needed to execute an application, which is classified in class 709, subclass 217.
  - II. Claims 18-26, drawn to a connector server containing storing units and managing units, classified in class, subclass 711/105.
  - III. Claims 27-32, which are drawn to a medium for storing service-related data, containing input information, identifying information, and output definition for service funtions.
1. Inventions I, II, and III are related as subcombination disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. The following case instants:

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Invention II has separate utility such as a method for storing the connector unit information, as opposed to claim 1 wherein the main limitation **is** the terminal comprising the connector unit.

Invention III has separate utility from group I in that the main limitation is drawn to identifying connector related information instead of claiming the actual connector obtaining unit itself.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and search for Groups II and III are not required for group I, restriction for examination purposes as indicated is proper.

During a telephone conversation with Charles Gorenstein, attorney docket # 0033-1042PUS1, on April 24<sup>th</sup>, 2009 an election was made without traverse to prosecute the invention of group I, claims 1-17. Affirmation of this election must be made by applicants in replying to this Office action. Claims 18-32 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

2. Claims 18-32 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected group of invention, there being no allowable generic or linking claim. Election was made **without** traverse.

**Claim Rejections – 35 USC 102**

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office Action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4 are rejected under 35 USC 102(e) as being anticipated by Sapuram et al (US 2004/0015596).

Regarding claim 1, Sapuram et al discloses:

A connector obtaining unit referring to a description of an application (see sec [0037], lines 5-10, which discloses a connector and connector function designation for defining data types), and obtaining connector being information for specifying a function required for executing said application (see sec [0037], lines 5-9, “connector function designation”); and a function utilizing unit accessing a location of said function described in said connector based on access information relating to the location, and utilizing said function specified by said connector (see fig 9 and sec [0033], lines 28-33, which teaches using the connector to access the physical address of the resource).

Regarding claim 2, Sapuram et al discloses:

Wherein said access information described in said connector is a URI (Uniform Resource Identifier) for accessing said location (see sec [0033], lines 2-5, “URI”).

Regarding claim 3, Sapuram et al discloses:

Wherein said function utilizing unit obtains result from said function by passing the information defined by said connector to said function specified by said connector (see sec [0058], lines 2-7, which teaches that the connectors are used to pass function related information to the gateway).

Regarding claim 4, Sapuram et al discloses:

Wherein said connector includes data conversion information (see sec [0059], lines 4-8), and said function utilizing unit converts data obtained from said application based on said data conversion information (see sec [0060], lines 6-13), and passes the converted data to said function (see sec [0060], lines 7-12, which teaches passing the converted security credentials to the gateway).

Regarding claim 7, Sapuram et al discloses:

A first connector determining unit comparing identification information unique to said application with identification information unique to said connector when executing said application (see sec [0032], lines 22-27, which teaches identifying the appropriate connector for the designated communication), and determining whether said function can be utilized using said

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connector or not (see sec [0039], lines 25-29, which teaches determining whether a connector is used for the particular peer to peer embodiment).

Regarding claim 8, Sapuram et al discloses:

Wherein said application includes unique information customized according to the service utilization terminal (see sec [0037], lines 10-13, “unique name”), said connector includes unique information customized according to the service utilization terminal (see sec [0037], lines 10-13), and said first connector determining unit compares identification information unique to said customized application with identification information unique to said connector (see sec [0051], lines 10-15, which teaches comparing the secure credential information), and determines whether said function can be determined or not, using said connector when service utilization terminal executes said application (see sec [0039], lines 25-29).

Regarding claim 13, Sapuram et al discloses:

The terminal wherein a description of said application includes a connector condition provided with an obtaining destination for obtaining said connector and at least one of information unique to said connector and information relating to said function specified by said connector (see sec [0030], lines 12-18, which teaches source to destination considerations for connectors), and said connector obtaining unit obtains a connector satisfying said connector condition from said obtaining destination (see sec [0080], lines 1-3 and 10-14, which teaches obtaining attribute information for the sender).

Regarding claim 14, Sapuram et al discloses:

The terminal wherein said connector obtaining unit includes a connector selecting unit selecting a predetermined connector from a plurality of different connectors as a connector to be

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obtained by said connector obtaining unit when executing said application (see fig. 1 and sec [0026], lines 48-54, which teaches a global registry of connectors), and said function utilizing unit utilizes a function specified by said selected predetermined connector among a plurality of different functions specified by said plurality of different connectors (see sec [0027], lines 1-3).

Regarding claim 15, Sapuram et al discloses:

An application obtaining unit obtaining said application (see sec [0027], lines 1-3).

### **Claim Rejections – 35 USC 103**

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office Action:

- (a) A patent may not be obtained through the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sapuram et al (US 2004/0015596), in view of Braithwaite et al (US 2004/0193893).

With respect to claim 5, Sapuram et al teaches a method wherein said connector includes data conversion information (see sec [0059], lines 4-8).

Sapuram et al teaches all the limitations of claim 5, except for wherein said function utilizing unit converts a result obtained from said function based on said data conversion information, and passes the converted result to said application.

The general concepts of wherein said function utilizing unit converts a result obtained from said function based on said data conversion information (see sec [0050], lines 7-11, which

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teaches converting the result retrieved from the transformation function), and passes the converted result to said application (see sec [0050], lines 8-13, which teaches converting the result to application B) are well known in the art as illustrated by Braithwaite et al.

It would have been obvious to one of ordinary skill in the art to combine Sapuram et al with the general concept of wherein said function utilizing unit converts a result obtained from said function based on said data conversion information, and passes the converted result to said application, as illustrated by Braithwaite et al, in order to successfully provide application functions to users.

8. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sapuram et al (US 2004/0015596), in view of Braithwaite et al (US 2004/0193893), further in view of Chang et al (US 2002/0062397).

With respect to claim 6, Sapuram et al teaches a method wherein said connector includes data conversion information (see sec [0059], lines 4-8).

Sapuram et al teaches all the limitations of claim 6, except for wherein said function utilizing unit converts a result obtained from said function based on said data conversion information, and passes the converted result to said application.

The general concepts of wherein said function utilizing unit converts a result obtained from said function based on said data conversion information (see sec [0050], lines 7-11, which teaches converting the result retrieved from the transformation function), and passes the converted result to said application (see sec [0050], lines 8-13, which teaches converting the result to application B) are well known in the art as illustrated by Braithwaite et al.

It would have been obvious to one of ordinary skill in the art to combine Sapuram et al with the general concept of wherein said function utilizing unit converts a result obtained from said function based on said data conversion information, and passes the converted result to said application, as illustrated by Braithwaite et al, in order to successfully provide application functions to users.

Sapuram et al, in combination with Braithwaite et al, teaches all the limitations of claim 6, except for wherein said application is an application outputting the result obtained from said function, converted by said function utilizing unit and passed from said function utilizing unit.

The general concepts of wherein said application is an application outputting the result obtained from said function (see sec [0240], lines 5-8, which teaches that the converted result is output), converted by said function utilizing unit and passed from said function utilizing unit (see sec [0240], lines 5-15, which teaches that the results are converted by helper applications and transmitted from a server application) are well known in the art as illustrated by Chang et al.

It would have been obvious to one of ordinary skill in the art to combine Sapuram et al and Braithwaite et al with the general concept of wherein said application is an application outputting the result obtained from said function, converted by said function utilizing unit and passed from said function utilizing unit, as illustrated by Chang et al, in order to efficiently transmit application data.

9. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sapuram et al (US 2004/0015596), in view of Ney et al (US 4,653,838).



With respect to claim 9, Sapuram et al teaches a service terminal wherein said connector obtaining unit obtains a connector held by a different device by accessing said different device (see sec [0027], lines 17-22, which teaches the connectors supporting different protocols).

Sapuram et al teaches all the limitations of claim 9, except for wherein said service utilization terminal further comprises a connector storing unit storing said obtained connector.

The general concept of wherein said service utilization terminal further comprises a connector storing unit storing said obtained connector (see col. 6, lines 64-68, which teaches the terminal comprising a connector storage mechanism) is well known in the art as illustrated by Ney et al.

It would have been obvious to one of ordinary skill in the art to combine Sapuram et al with the general concept of wherein said service utilization terminal further comprises a connector storing unit storing said obtained connector, as illustrated by Ney et al, in order to efficiently provide a connector storage mechanism.

10. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sapuram et al (US 2004/0015596), in view of Jarvensivu (US 2002/0188736).

With respect to claim 10, Sapuram et al teaches a service terminal wherein said connector obtaining unit obtains a connector held by a different device by accessing said different device (see sec [0027], lines 17-22, which teaches the connectors supporting different protocols).

Sapuram et al teaches all the limitations of claim 10, except for wherein said application includes validity information including at least one of information relating to a valid period of said application and a number of allowed operations of utilizing said application, and said

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service utilization terminal further comprises an application determining unit referring to said validity information and determining whether said application can be executed or not.

The general concept of wherein said application includes validity information including at least one of information relating to a valid period of said application and a number of allowed operations of utilizing said application (see sec [0039], lines 2-8, which teaches accessing applications is based upon a predetermined period of time and access to certain applications is provided), and said service utilization terminal further comprises an application determining unit referring to said validity information and determining whether said application can be executed or not (see sec [0044], lines 2-6, which teaches that application execution is permitted based on payment and a determination at the decision block) is well known in the art as illustrated by Jarvensivu.

It would have been obvious to one of ordinary skill in the art to combine Sapuram et al with the general concept of wherein said application includes validity information including at least one of information relating to a valid period of said application and a number of allowed operations of utilizing said application, and said service utilization terminal further comprises an application determining unit referring to said validity information and determining whether said application can be executed or not, as illustrated by Jarvensivu, in order to efficiently implement a application access system based on authorization.

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sapuram et al (US 2004/0015596), in view of Jarvensivu (US 2002/0188736), further in view of Tanaka (US 5,845,069).

With respect to claim 11, Sapuram et al teaches a service terminal wherein said connector obtaining unit obtains a connector held by a different device by accessing said different device (see sec [0027], lines 17-22, which teaches the connectors supporting different protocols).

Sapuram et al teaches all the limitations of claim 11, except for wherein said application includes validity information including at least one of information relating to a valid period of said application and a number of allowed operations of utilizing said application, and said service utilization terminal further comprises an application determining unit referring to said validity information and determining whether said application can be executed or not.

The general concept of wherein said application includes validity information including at least one of information relating to a valid period of said application and a number of allowed operations of utilizing said application (see sec [0039], lines 2-8, which teaches accessing applications is based upon a predetermined period of time and access to certain applications is provided), and said service utilization terminal further comprises an application determining unit referring to said validity information and determining whether said application can be executed or not (see sec [0044], lines 2-6, which teaches that application execution is permitted based on payment and a determination at the decision block) is well known in the art as illustrated by Jarvensivu.

It would have been obvious to one of ordinary skill in the art to combine Sapuram et al with the general concept of wherein said application includes validity information including at least one of information relating to a valid period of said application and a number of allowed operations of utilizing said application, and said service utilization terminal further comprises an application determining unit referring to said validity information and determining whether said

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application can be executed or not, as illustrated by Jarvensivu, in order to efficiently implement a application access system based on authorization.

Sapuram et al, in combination with Jarvensivu, teaches all the limitations of claim 11, except for a second connector determining unit referring to said validity information when executing said application, and determining whether said function can be specified or not, using said connector.

The general concept of a second connector determining unit referring to said validity information when executing said application, and determining whether said function can be specified or not, using said connector (see col. 23, lines 28-35, which teaches a second judging unit for determining if a command can be carried out) is well known in the art as illustrated by Tanaka.

It would have been obvious to one of ordinary skill in the art to combine Sapuram et al and Jarvensivu with the general concept of a second connector determining unit referring to said validity information when executing said application, and determining whether said function can be specified or not, using said connector, as illustrated by Tanaka, in order to efficiently implement a data accessing mechanism using connectors to fetch application information.

12. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sapuram et al (US 2004/0015596), in view of Jarvensivu (US 2002/0188736), further in view of Tanaka (US 5,845,069).

With respect to claim 12, Sapuram et al teaches a service terminal wherein said connector obtaining unit obtains a connector held by a different device by accessing said different device (see sec [0027], lines 17-22, which teaches the connectors supporting different protocols).

Sapuram et al teaches all the limitations of claim 12, except for wherein said application includes validity information including at least one of information relating to a valid period of said application and a number of allowed operations of utilizing said application, and said service utilization terminal further comprises an application determining unit referring to said validity information and determining whether said application can be executed or not.

The general concept of wherein said application includes validity information including at least one of information relating to a valid period of said application and a number of allowed operations of utilizing said application (see sec [0039], lines 2-8, which teaches accessing applications is based upon a predetermined period of time and access to certain applications is provided), and said service utilization terminal further comprises an application determining unit referring to said validity information and determining whether said application can be executed or not (see sec [0044], lines 2-6, which teaches that application execution is permitted based on payment and a determination at the decision block) is well known in the art as illustrated by Jarvensivu.

It would have been obvious to one of ordinary skill in the art to combine Sapuram et al with the general concept of wherein said application includes validity information including at least one of information relating to a valid period of said application and a number of allowed operations of utilizing said application, and said service utilization terminal further comprises an application determining unit referring to said validity information and determining whether said

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application can be executed or not, as illustrated by Jarvensivu, in order to efficiently implement a application access system based on authorization.

Sapuram et al, in combination with Jarvensivu, teaches all the limitations of claim 12, except for wherein said connector obtaining unit obtains a new connector when said second connector determining unit determines that it is impossible to specify said function, using said connector.

The general concept of wherein said connector obtaining unit obtains a new connector when said second connector determining unit determines that it is impossible to specify said function, using said connector (see col. 27, lines 37-41, which teaches that it is impossible for an unrightfully selected application to be selected ) is well known in the art as illustrated by Tanaka.

It would have been obvious to one of ordinary skill in the art to combine Sapuram et al and Jarvensivu with the general concept of wherein said connector obtaining unit obtains a new connector when said second connector determining unit determines that it is impossible to specify said function, using said connector, as illustrated by Tanaka, in order to efficiently implement a data accessing mechanism using connectors to fetch application information.

13. Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sapuram et al (US 2004/0015596) in view of Thompson (US 5,465,401).

With respect to claim 16, Sapuram et al teaches a service terminal wherein said connector obtaining unit obtains a connector held by a different device by accessing said different device (see sec [0027], lines 17-22, which teaches the connectors supporting different protocols).

Sapuram et al teaches all the limitations of claim 16, except for the service utilization terminal being a mobile phone.

The general concept of the service utilization terminal being a mobile phone (see col. 5, lines 20-24, “mobile communication device” and col. 9, lines 20-25, “application connector”) is well known in the art as illustrated by Thompson.

It would have been obvious to one of ordinary skill in the art to combine Sapuram et al with the general concept of the service utilization terminal being a mobile phone, as illustrated by Thompson, in order to sufficiently maintain a communication system.

14. Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sapuram et al (US 2004/0015596) in view of Thompson (US 5,465,401).

With respect to claim 17, Sapuram et al teaches a service terminal wherein said connector obtaining unit obtains a connector held by a different device by accessing said different device (see sec [0027], lines 17-22, which teaches the connectors supporting different protocols).

Sapuram et al teaches all the limitations of claim 17, except for the service utilization terminal being a TV.

The general concept of the service utilization terminal being a TV (see col. 15, lines 23-25, “television”) is well known in the art as illustrated by Thompson.

It would have been obvious to one of ordinary skill in the art to combine Sapuram et al with the general concept of the service utilization terminal being a TV, as illustrated by Thompson, in order to sufficiently maintain a communication system.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Randy A. Scott whose telephone number is (571) 272-3797. The examiner can normally be reached on Monday-Thursday 7:30 am-5:00 pm, second Fridays 7:30 am-4pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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